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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,128	01/03/2005	Yakayuki Yanagisawa	0054-0291PUS1	9560
2292 75 BIRCH STEWAI	90 02/07/200 RT KOLASCH & BI	EXAMINER		
PO BOX 747			ALSOMIRI, ISAM A	
FALLS CHURCI	H, VA 22040-0747		ART UNIT	PAPER NUMBER
			3662	
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SHORTENED STATUTORY	PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE	
2.1401/		00/03/0003	EL ECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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		Application No.	Applicant(s)				
Office Action Summary		10/520,128	YANAGISAWA ET	ΓAL.			
		Examiner	Art Unit				
		Isam Alsomiri	3662				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
WHIC - Exter after - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOR REF CHEVER IS LONGER, FROM THE MAILING asions of time may be available under the provisions of 37 CFR SIX (6) MONTHS from the mailing date of this communication. period for reply is specified above, the maximum statutory perior re to reply within the set or extended period for reply will, by state eply received by the Office later than three months after the mater and patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMU 1.136(a). In no event, however, m od will apply and will expire SIX (6) tute, cause the application to become	UNICATION. ay a reply be timely filed MONTHS from the mailing date of this cone ABANDONED (35 U.S.C. § 133).				
Status							
2a) <u></u>	Responsive to communication(s) filed on <u>03</u> This action is FINAL . 2b) The Since this application is in condition for allow closed in accordance with the practice under the practice	his action is non-final. vance except for formal r	•	e merits is			
Dispositi	on of Claims						
5) □ 6) ⋈ 7) ⋈ 8) □ Applicati 9) □ 10) ⋈	Claim(s) 1-10 is/are pending in the application 4a) Of the above claim(s) is/are withded Claim(s) is/are allowed. Claim(s) 1 is/are rejected. Claim(s) 2-10 is/are objected to. Claim(s) are subject to restriction and on Papers The specification is objected to by the Examination The drawing(s) filed on 03 January 2005 is/a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correction on the oath or declaration is objected to by the	rawn from consideration. I/or election requirement Iner. re: a) accepted or b) accepted in able to the drawing (s) be held in able ection is required if the draw	☑ objected to by the Examin eyance. See 37 CFR 1.85(a). wing(s) is objected to. See 37 CF	FR 1.121(d).			
Priority u	nder 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 							
2) Notic 3) Inform	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date <u>071406; 010305</u> .	Paper	iew Summary (PTO-413) No(s)/Mail Date e of Informal Patent Application				

DETAILED ACTION

Drawings

Figures 8-9 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as obvious over applicant's

Admitted Prior Art (APA) in view of Endo US 4,552,456 and Beuhler et al

US006860350B2. APA discloses in figure 8, a coherent laser radar device,

comprising: a laser source (1) that oscillates a laser beam which is linearly polarized; a

first optical coupler (2) that is formed of a polarization maintained type optical element

that branches the laser beam from the laser source into two lights, a local light and a

transmitted light; an optical modulator that is formed of a polarization maintained type optical element that modulates the transmitted light that is branched by the first optical coupler (3); an optical amplifier (4) that amplifies the transmitted light which is outputted from the optical modulator; a transmitting/receiving optical (6) system that applies the transmitted light which is amplified by the optical amplifier toward a target and receives a scattered light from the target; a transmitting/receiving light splitting device (5) that splits the transmitted light that is amplified by the space type optical amplifier and the received light that is scattered by the target; a second optical coupler (7) that is formed of a polarization maintained type optical element that mixes the local light that is branched by the first optical coupler and the received light that is split by the transmitting/receiving light splitting device together; a photodetector (8) that detects heterodyne of a mixed light from the second optical coupler to output a beat signal of the received light; a signal processing device (9) that processes a signal that is amplified by the beat signal amplifier; characterized in that an optical path that extends from the laser source to the space type optical amplifier through the first optical coupler, an optical path that extends from the transmitting/receiving light splitting device to the photodetector through the second optical coupler, and an optical path that extends from the first optical coupler to the second optical coupler are connected by polarization maintained type single mode optical fibers (see specification page 4 lines 3-9).

APA is silent about the optical amplifier (4) being a space type optical amplifier that amplifies the transmitted light which is outputted from the optical modulator over space propagation. However, an amplifier that amplifies light over space propagation is

well known by using different types of gases as an amplifying medium. It would have been very obvious to use optical amplifier using gas amplification medium as an alternative way to achieve the same result.

APA does not teach a beat signal amplifier that amplifies the beat signal which is outputted from the photodetector; However, amplifying the beat signal is very well known. Endo teaches an optical radar system including a beat signal amplifier 23 (see figure 1). It would have been obvious to modify APA to include the beat signal amplifier to obtain a stronger signal for the signal processor.

APA does not teach a display device that displays a result processed by the signal processing device. However having a display device is well known and obvious. Beuhler teaches an optical radar that includes a display (see figure 9). It would have been obvious to include the display to view the result or the detected signals.

Allowable Subject Matter

Claims 2-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isam Alsomiri whose telephone number is 571-272-6970. The examiner can normally be reached on Monday-Friday 8:00-5:00.

Art Unit: 3662

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza can be reached on 571-272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Isam Alsomiri

February 4, 2007